

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE



Applicant: Stanley S. Toncich) Dkt. No.: UTL 00004
)
Serial No.: 09/927,136) Art Unit: 2821
)
Filed: August 10, 2001) Examiner: Tho Gia Phan
)
Title: TUNABLE MATCHING CIRCUIT)

INFORMATION DISCLOSURE STATEMENT TRANSMITTAL LETTER

Commissioner for Patents
Washington, D.C. 20231

09/25/2002 DTESSEN1 00000081 09927136

01 FC:126

180.00 GP

Dear Sir:

Pursuant to 37 C.F.R. 1.97 and 1.98 and the duty of disclosure set forth in 37 C.F.R. 1.56, the Examiner in charge of the above-identified application is requested to consider and make of record the references listed on the PTO/SB/08A submitted herewith. A copy of each of the listed references is also enclosed. A fee of \$180.00 is enclosed pursuant to 37 C.F.R. § 1.17(p).

Although the information submitted herewith may be "material" to the Examiner's consideration of the subject application, this submission is not intended to constitute an admission that such information is "prior art" as to the claimed invention.

In accordance with 37 C.F.R. § 1.97(g), the filing of this Information Disclosure Statement shall not be construed to mean that a search has been made.

This Information Disclosure Statement is being submitted by express mail pursuant to 37 C.F.R. § 1.10, and therefore has a filing date of the date of deposit. This submission includes:

1. Information Disclosure Statement by Applicant (6 pages)
2. One Copy of Each Reference
3. Fee Transmittal (In Duplicate)
4. Credit Card Payment Form (1 page)
5. Postcard

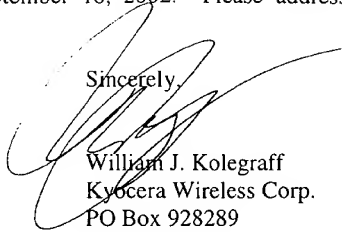
I certify that this correspondence is being deposited with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to: Commissioner for Patents, Washington, D.C. 20231.

William J. Kolegraff

Date of Deposit: September 18, 2002

Respectfully submitted September 18, 2002. Please address any questions or comments to the undersigned.

Sincerely,

A handwritten signature in black ink, appearing to read 'W. Kolegraff', is written over the typed name and address.

William J. Kolegraff
Kyocera Wireless Corp.
PO Box 928289
San Diego, CA 92192-8289
Phone: 858/882-2000
Reg. No. 41,125



PTO/SB/17 (11-00)
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FEE TRANSMITTAL for FY 2001

Patent fees are subject to annual revision.

TOTAL AMOUNT OF PAYMENT (\$) 180.00

Complete if Known

Application Number	09/927,136
Filing Date	August 10, 2001
First Named Inventor	Stanley S. Toncich
Examiner Name	Tho Gia Phan
Group Art Unit	2821
Attorney Docket No.	UTL 00004

METHOD OF PAYMENT

1. ☐ The Commissioner is hereby authorized to charge indicated fees and credit any overpayments to:

Deposit Account Number
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- ☐ Charge Any Additional Fee Required Under 37 CFR 1.16 and 1.17
☐ Applicant claims small entity status. See 37 CFR 1.27

2. ☒ Payment Enclosed:

☐ Check ☒ Credit card ☐ Money Order ☐ Other

FEE CALCULATION

1. BASIC FILING FEE

Large Entity Fee Code (\$)	Small Entity Fee Code (\$)	Fee Description	Fee Paid
101 710	201 355	Utility filing fee	<input type="text"/>
106 320	206 160	Design filing fee	<input type="text"/>
107 490	207 245	Plant filing fee	<input type="text"/>
108 710	208 355	Reissue filing fee	<input type="text"/>
114 150	214 75	Provisional filing fee	<input type="text"/>

SUBTOTAL (1) (\$)

2. EXTRA CLAIM FEES

Extra Claims Fee from below Fee Paid
Total Claims -20** = X =
Independent Claims -3** = X =
Multiple Dependent =

Large Entity Fee Code (\$)	Small Entity Fee Code (\$)	Fee Description
103 18	203 9	Claims in excess of 20
102 80	202 40	Independent claims in excess of 3
104 270	204 135	Multiple dependent claim, if not paid
109 80	209 40	** Reissue independent claims over original patent
110 18	210 9	** Reissue claims in excess of 20 and over original patent

SUBTOTAL (2) (\$)

**or number previously paid, if greater; For Reissues, see above

FEE CALCULATION (continued)

Large Entity Fee Code (\$)	Small Entity Fee Code (\$)	Fee Description	Fee Paid
105 130	205 65	Surcharge - late filing fee or oath	<input type="text"/>
127 50	227 25	Surcharge - late provisional filing fee or cover sheet	<input type="text"/>
139 130	139 130	Non-English specification	<input type="text"/>
147 2,520	147 2,520	For filing a request for ex parte reexamination	<input type="text"/>
112 920*	112 920*	Requesting publication of SIR prior to Examiner action	<input type="text"/>
113 1,840*	113 1,840*	Requesting publication of SIR after Examiner action	<input type="text"/>
115 110	215 55	Extension for reply within first month	<input type="text"/>
116 390	216 195	Extension for reply within second month	<input type="text"/>
117 890	217 445	Extension for reply within third month	<input type="text"/>
118 1,390	218 695	Extension for reply within fourth month	<input type="text"/>
128 1,890	228 945	Extension for reply within fifth month	<input type="text"/>
119 310	219 155	Notice of Appeal	<input type="text"/>
120 310	220 155	Filing a brief in support of an appeal	<input type="text"/>
121 270	221 135	Request for oral hearing	<input type="text"/>
138 1,510	138 1,510	Petition to institute a public use proceeding	<input type="text"/>
140 110	240 55	Petition to revive - unavoidable	<input type="text"/>
141 1,240	241 620	Petition to revive - unintentional	<input type="text"/>
142 1,240	242 620	Utility issue fee (or reissue)	<input type="text"/>
143 440	243 220	Design issue fee	<input type="text"/>
144 600	244 300	Plant issue fee	<input type="text"/>
122 130	122 130	Petitions to the Commissioner	<input type="text"/>
123 50	123 50	Processing fee under 37 CFR 1.17(q)	<input type="text"/>
126 180	126 180	Submission of Information Disclosure Statement	<input type="text"/>
581 40	581 40	Recording each patent assignment per property (times number of properties)	<input type="text"/>
146 710	246 355	Filing a submission after final rejection (37 CFR § 1.129(a))	<input type="text"/>
149 710	249 355	For each additional invention to be examined (37 CFR § 1.129(b))	<input type="text"/>
179 710	279 355	Request for Continued Examination (RCE)	<input type="text"/>
169 900	169 900	Request for expedited examination of a design application	<input type="text"/>
Other fee (specify) IDS Submission Fee under 37 CFR 1.17(p)			180.00

*Reduced by Basic Filing Fee Paid SUBTOTAL (3) (\$) 180.00

SUBMITTED BY

Name (Print Type) William J. Kolegraff
Signature

Registration No. (Attorney/Agent) 41,125

Complete (if applicable)

Telephone 858-882-2000
Date September 18, 2002

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Substitute for form 1449A/PTO INFORMATION DISCLOSURE STATEMENT BY APPLICANT <i>(use as many sheets as necessary)</i>		Complete if Known <table border="1" style="width: 100%; border-collapse: collapse;"> <tr><td>Application Number</td><td>09/927,136</td></tr> <tr><td>Filing Date</td><td>August 10, 2001</td></tr> <tr><td>First Named Inventor</td><td>Stanley S. Toncich</td></tr> <tr><td>Art Unit</td><td>2821</td></tr> <tr><td>Examiner Name</td><td>Tho Gia Phan</td></tr> <tr><td>Attorney Docket Number</td><td>UTL 00004</td></tr> </table>		Application Number	09/927,136	Filing Date	August 10, 2001	First Named Inventor	Stanley S. Toncich	Art Unit	2821	Examiner Name	Tho Gia Phan	Attorney Docket Number	UTL 00004
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Attorney Docket Number	UTL 00004														
Sheet	1	of	6												

U.S. PATENT DOCUMENTS					
Examiner Initials ¹	Cite No. ¹	Document Number	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number-Kind Code ² (if known)			
	1	us- 5,729,239	03-17-1998	Rao, Jaganmohan B.L.	
	2	us- 6,049,726	04-11-2000	Gruenwald, Werner, et al.	
	3	us- 6,160,524	12-12-2000	Wilber, William	
	4	us- 6,198,441 B1	03-06-2001	Okabe, Hiroshi	
	5	us- 6,028,561	02-22-2000	Takei, Ken	
	6	us- 5,973,567	10-26-1999	Heal, Mark D., et al.	
	7	us- 4,475,108	10-02-1984	Moser, Kenneth R.	Abstract, Fig. 1
	8	us- 3,678,305	07-18-1972	George, Edward	
	9	us- 3,918,012	11-04-1975	Peuzin, Jean Claude	
	10	us- 5,450,092	09-12-1995	Das, Satyendranath	
	11	us- 6,333,719 B1	12-25-2001	Varadan, Vijay K.	
	12	us- 5,212,463	05-18-1993	Babbitt, Richard W., et al.	
	13	us- 4,733,328	03-22-1988	Blazej, Daniel C.	
	14	us- 5,617,104	04-01-1997	Das, Satyendranath	
	15	us- 5,307,033	04-26-1994	Koscica, Thomas E., et al.	
	16	us- 5,427,988	06-27-1995	Sengupta, Louise, et al.	
	17	us- 5,557,286	09-17-1996	Varadan, Vijay K., et al.	
	18	us- 5,561,407	10-01-1996	Koscica, Thomas E., et al.	
	19	us- 5,589,845	12-31-1996	Yandrofski, Robert M.	
	20	us- 5,496,795	03-05-1996	Das, Satyendranath	

FOREIGN PATENT DOCUMENTS						
Examiner Initials ¹	Cite No. ¹	Foreign Patent Document	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T ⁶
		Country Code ³ -Number ⁴ -Kind Code ⁵ (if known)				
	21	WO 00/62367	10-19-2000	Carlsson, Erik, et al.		
	22	JP 29-05-00 2001338839	07-12-2001	Tsuneo, Mishima		
	23	EP 0 637 131 A1	02-01-1995	Fujita Masanori		
	24	EP 0 843 374 A2	05-20-1998	Muller, Frithjof E., et al.	Abstract, Fig. 1	
	25	EP 0 638 953 A1	02-15-1995	Yasuoka, et al.		
	26	WO 00/35042	06-15-2000	Sengupta, Louise, et al		
	27	EP 0 680 108 A1	11-02-1995	Atokawa, Masayuki		
	28	EP 0 881 700 A1	12-02-1998	Atokawa, Masayuki		
	29	WO 00/28613	05-18-2000	Sengupta, Louise, et al.		
	30	DE 40 36 866 A1	07-25-1991	Yamamoto, Masaki		

Examiner Signature	Date Considered
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¹ Applicant's unique citation designation number (optional). ² See Kinds Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. ⁶ Applicant is to place a check mark here if English language Translation is attached.

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Substitute for form 1449A/PTO

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

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Sheet 2 of 6

Complete if Known

Application Number	09/927,136
Filing Date	August 10, 2001
First Named Inventor	Stanley S. Toncich
Art Unit	2821
Examiner Name	Tho Gia Phan
Attorney Docket Number	UTL 00004

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		Number - Kind Code ² (if known)			
	31	us. 6,097,263	08-01-2000	Mueller, Carl H., et al.	
	32	us. 5,987,314	11-16-1999	Salto, Atsushi	
	33	us. 5,472,935	12-5-1995	Yandrofski, Robert, et al.	
	34	us. 4,799,066	01-17-1989	Deacon, Malcolm J.	
	35	us. 5,166,857	11-24-1992	Avanic, Branko, et al.	
	36	us. 5,880,921	03-09-1999	Tham, J.L. Julian, et al.	
	37	us. 5,640,042	06-17-1997	Koscica, Thomas E., et al.	
	38	us. 4,835,499	05-30-1989	Pickett, Michael N.	Abstract, Fig. 3
	39	us. 3,413,543	11-26-1968	Schubring, et al.	Col. 4, lines 3-31, Fig. 2
	40	us. 5,945,887	08-31-1999	Makino, Toshihiro, et al.	
	41	us. 5,973,568	10-26-1999	Shapiro, Gary, et al.	
	42	us. 5,216,392	06-01-1993	Fraser, Randall S.	
	43	us. 3,676,803	07-11-1972	Simmons, William J.	
	44	us. 3,836,874	09-17-1974	Maeda, Minoru, et al.	
	45	us. 5,778,308	07-07-1998	Sroka, Peter, et al.	
	46	us. 5,777,524	07-07-1998	Wojewoda, Carl E., et al.	
	47	us. 6,052,036	04-18-2000	Enstrom, Hakan, et al.	
	48	us. 6,292,143 B1	09-18-2001	Romanofsky, Robert R.	
	49	us. 5,617,104	04-01-1997	Das, Satyendranath	
	50	us. 5,496,795	03-05-1996	Das, Satyendranath	

FOREIGN PATENT DOCUMENTS

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		Country Code ³ - Number ⁴ - Kind Code ⁵ (if known)				
	51	EP 1 043 741 A2	10-11-2000	Klee, Mareike, et al.		
	52	EP 0 795 922 A1	09-17-1997	Tsuru, Teruhisa, et al.		
	53	EP 0 909 024 A2	04-14-1999	Nakamichi, et al.		
	54	WO 00/79648 A1	12-28-2000	Varadan, Vijay K., et al.		
	55	WO 00/79645 A1	12-28-2000	Falk, Kent, et al.		
	56	WO 94/13028	06-09-1994	Yandrofski, et al.	Col. 8, lines 9-26,	
	57				Figs. 30-31; p. 14,	
	58				par. 4, abst.,	
	59				pgs. 2, 4, 11	
	60					

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Substitute for form 1449B/PTO		Complete if Known			
INFORMATION DISCLOSURE STATEMENT BY APPLICANT <i>(use as many sheets as necessary)</i>		Application Number	09/927,136		
		Filing Date	August 10, 2001		
		First Named Inventor	Stanley S. Toncich		
		Group Art Unit	2821		
		Examiner Name	Tho Gia Phan		
Sheet	3	of	6	Attorney Docket Number	UTL 00004

OTHER PRIOR ART -- NON PATENT LITERATURE DOCUMENTS			
Examiner Initials	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published	T ²
	61	A. Presser, "Varactor-Tunable, High-Q Microwave Filter," RCA Review, Vol. 42, Dec. 1981, pp. 691-705.	
	62	C. Chang and T. Itoh, "Microwave Active Filters Based on Coupled Negative Resistance Method," IEEE Trans. on Microwave Theory and Techniques, Vol. 38, No. 12, Dec. 1990, pp. 1879-1884.	
	63	P. Katzin, B. Bedard, and Y. Ayasli, "Narrow-Band MMIC Filters with Automatic Tuning and Q-Factor Control," 1993 IEEE MTT-S Int. Microwave Symp. Digest pp.403-406.	
	64	B. Hopf, I. Wolff, and M. Guglielmi, "Coplanar MMIC Active Bandpass Filters Using Negative Resistance Circuits," 1994 IEEE MTT-S Symposium Digest, pp. 1183-1185.	
	65	U. Karacaoglu and I.D. Robertson, "High Selectivity Varactor-Tuned MMIC Bandpass Filter Using Lossless Active Resonators," 1994 IEEE MTT-Symposium Digest, pp. 1191-1194.	
	66	B. Nauta, "A CMOS Transconductance-C Filter Technique for Very High Frequencies," IEEE Journal of Solid-State Circuits, Vol. 27, No. 2, February 1992, pp. 142-153.	
	67	K Fujita, H. Itoh, R. Yamamoto, "A 15.6 GHz Commercially Based 1/8 GaAs Dynamic Presealer," 1989 IEEE GaAs IC Symposium, pp. 113-116.	
	66	J. Smuk, P. Katzin, "MMIC Phase Locked L-S Band Oscillators," 1994 IEEE GaAs Symposium Digest, pp. 27-29.	
	69	S. R. Chandler, I. C. Hunter, and J.G. Gardiner, "Active Varactor Tunable Bandpass Filter," IEEE Microwave and Guided Wave Letters, Vol. 3, No. 3, March 1993, pp. 70-71.	
	70	I. C. Hunter and John D. Rhodes, "Electronically Tunable Microwave Bandpass Filters," IEEE Trans. on MTT, Vol. 30, No. 9, September 1982, pp. 1354-1367.	
	71	S. Toyoda, "Quarter-wavelength Coupled Variable Bandstop and Bandpass Filters Using Varactor Diodes," IEEE Trans. on Mtt, Vol. 30, No. 9, September 1982, pp. 1387-1389.	

Examiner Signature		Date Considered	
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		Filing Date	August 10, 2001		
		First Named Inventor	Stanley S. Toncich		
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		Examiner Name	Tho Gia Phan		
Sheet	4	of	6	Attorney Docket Number	UTL 00004

OTHER PRIOR ART -- NON PATENT LITERATURE DOCUMENTS			
Examiner Initials ¹	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published	T ²
	72	B. Yu. Kapilevich, "Variety of Approaches to Designing Microwave Active Filters," Proc. 27th European Microwave Conf., Jerusalem, Vol. 1, 1997, pp. 397-408.	
	73	B. Yu. Kapilevich, "Understand the Operation of Channelized Active Filters," Microwaves & RF, January 1997, pp. 89-92.	
	74	M. Dishal, "Alignment and Adjustment of Synchronously Tuned Multiple Resonator-Circuit Filters" Proc. IRE 39, November 1951, pp. 1448-1455.	
	75	S. B. Cohn, "Dissipation Loss in Multiple-Coupled-Resonator Filters," Proc. IRE 47, August 1959, pp. 1342-1348.	
	76	G. L. Matthaei, "An Electronically Tunable Up-Converter," Proc. IRE 49, November 1961, pp. 1703-1704.	
	77	E. G. Fubini and E.A. Guillemin, "Minimum Insertion Loss Filters," Proc. IRE 47, January 1959, pp. 37-41.	
	78	W.J. Getsinger, "Prototypes for Use in Broadbanding Reflection Amplifiers," IEEE Trans. PTGMITT-11, November 1963, pp. 486-497.	
	79	E.S. Kuh and M. Fukada, "Optimum Synthesis of Wide-Band Parametric Amplifiers and Converters," IRE Trans. PCCT-8, December 1961, pp.410-415.	
	80	W. J. Getsinger and G.L. Matthaei, "Some Aspects of the Design of Wide-Band Up-Converters and Nondegenerate Parametric Amplifiers," IEEE Trans. PTGMITT-12, January 1964, pp. 77-87.	
	81	R. L. Steven, "Design of a Tunable Multi-Cavity Waveguide Band-Pass Filter," 1959 IRE National Convention Record, Part 3, pp. 91-112.	
	82	J.J. Taub and B. F. Bogner, "Design of Three-Resonator Dissipative Band-Pass Filters Having Minimum Insertion Loss," Proc. IRE 45, pp. 681-687 (May 1957).	

Examiner Signature		Date Considered	
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		Group Art Unit	2821		
		Examiner Name	Tho Gia Phan		
Sheet	5	of	6	Attorney Docket Number	UTL 00004

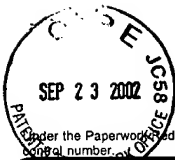
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	83	K.L. Kotzebue, "Broadband Electronically-Tunable Microwave Filters," 1960 IRE Wescon Convention Record, Part 1, pp.21-27.	
	84	J.P. Louhos and I. Pankinaho, "Electrical Tuning of Integrated Mobile Phone Antennas," Nokia Mobile Phones, pp. 69- 97 (September 15, 1999).	
	85	P. K. Panayi, M. Al-Nuaimi, and L. P. Ivrisimtzis, "Tuning Techniques for the Planar Inverted-F Antenna," National Conference on Antennas and Propagation Publication, No. 461, pp. 259-262 (April 1999).	
	86	Satoshi Makioka, et al., "A High Efficiency GaAs MCM Power Amplifier for 1.9 GHz Digital Cordless Telephones," IEEE 1994 Microwave and Millimeter-Wave Monolithic Circuits Symposium, pp. 51-54 (1994).	
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	90	International Search Report: PCT/IB 02/01078 (July 10, 2002).	
	91	International Search Report: PCT/IB 02/01087 (July 19, 2002).	
	92	International Search Report: PCT/IB 02/01107 (July 11, 2002).	
	93	International Search Report: PCT/IB 02/01120 (July 11, 2002).	

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		Application Number	09/927,136
INFORMATION DISCLOSURE STATEMENT BY APPLICANT <i>(use as many sheets as necessary)</i>		Filing Date	August 10, 2001
		First Named Inventor	Stanley S. Toncich
		Group Art Unit	2821
		Examiner Name	Tho Gia Phan
		Attorney Docket Number	UTL 00004
Sheet	6	of	6

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	94	International Search Report: PCT/IB 02/01098 (July 4, 2002).	
	95	International Search Report: PCT/IB 02/01082 (July 8, 2002).	
	96	International Search Report: PCT/IB 02/01144 (July 12, 2002).	
	97	International Search Report: PCT/IB 02/01026 (June 28, 2002).	
	98	International Search Report: PCT/IB 02/01027 (June 25, 2002).	
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